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THE TECHNIQUE OF PORTRAITURE

A practical discussion of photographic portraiture from the technical viewpoint. Its essentials: likeness, psychology and personal reactions, characterization; posing and lighting; lenses, sensitive materials; exposure and development. Illustrated.

The Photo Miniature

VOLUME XVII :: SEPT.-DEC., 1924 :: NUMBER 195

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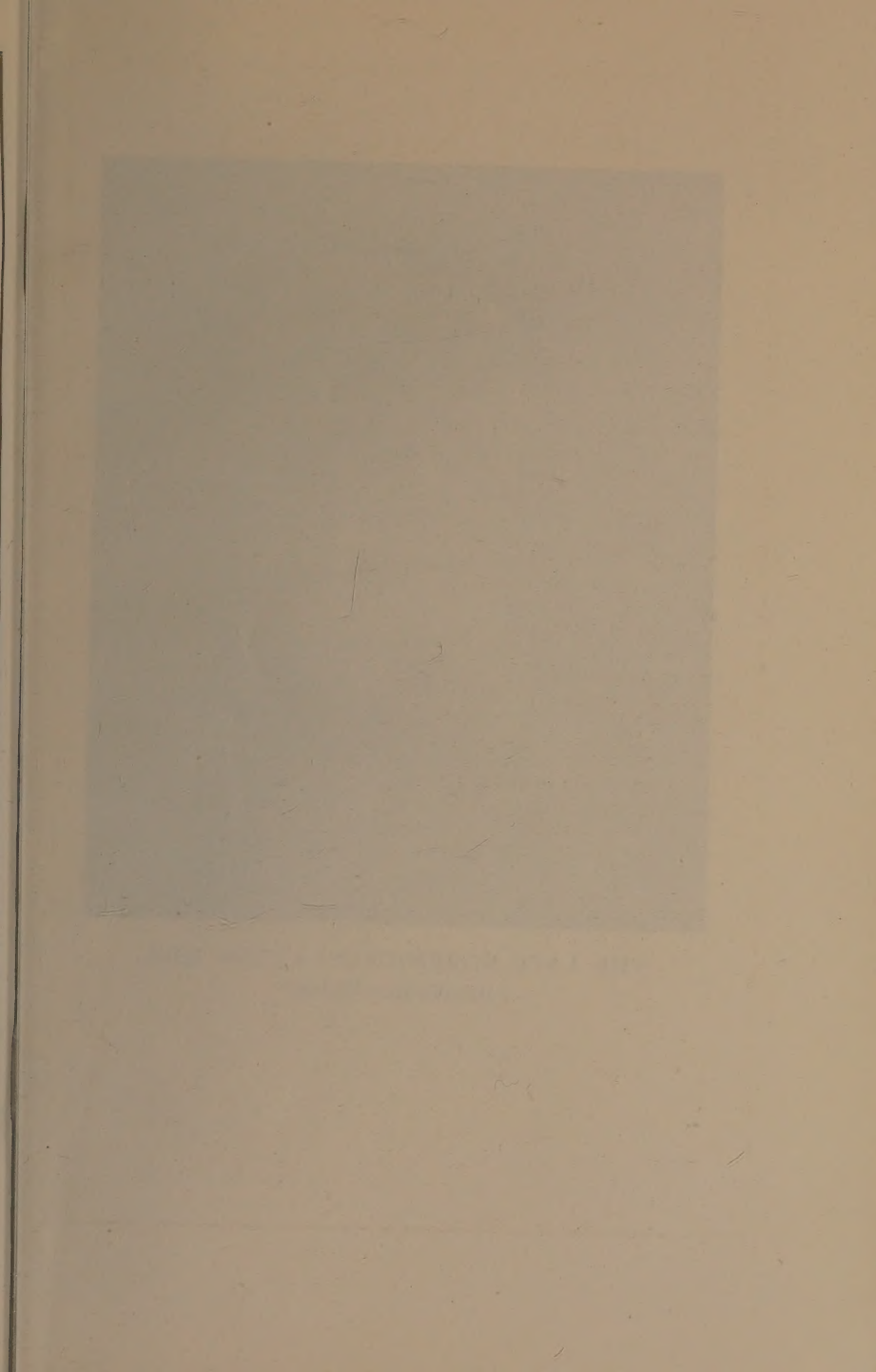
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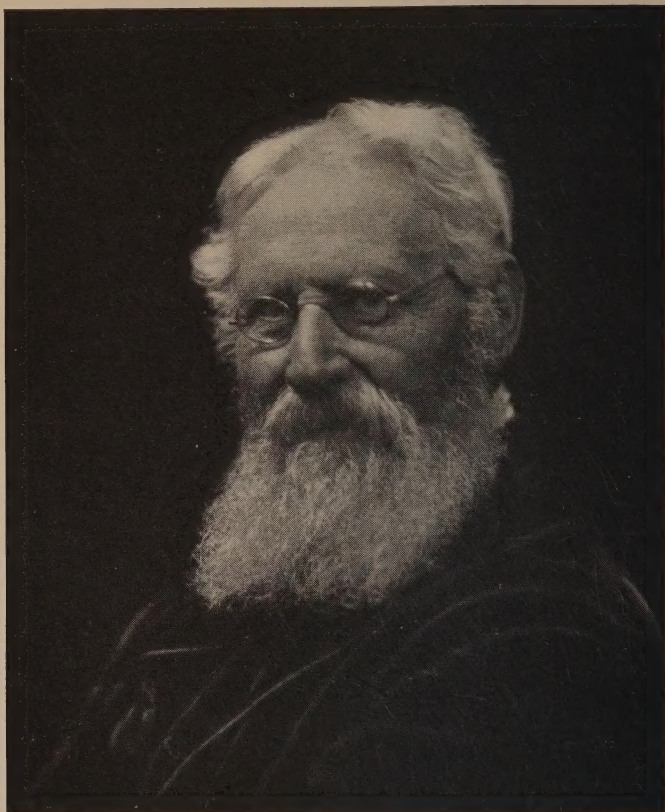
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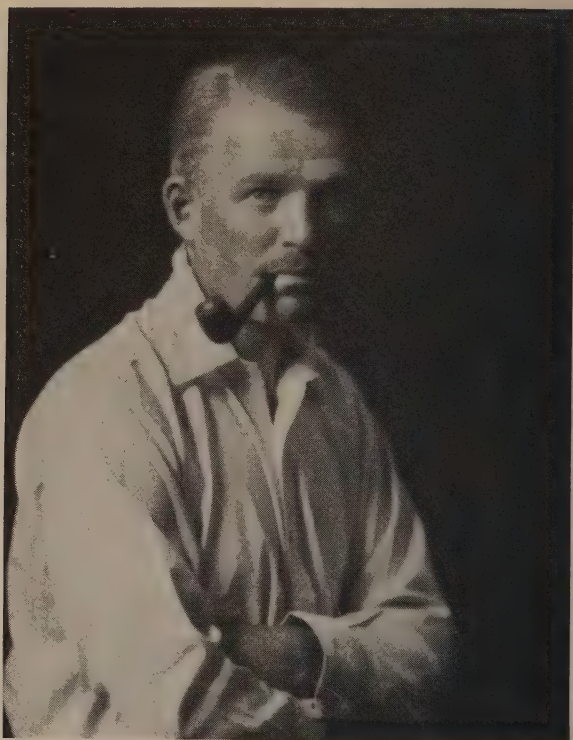


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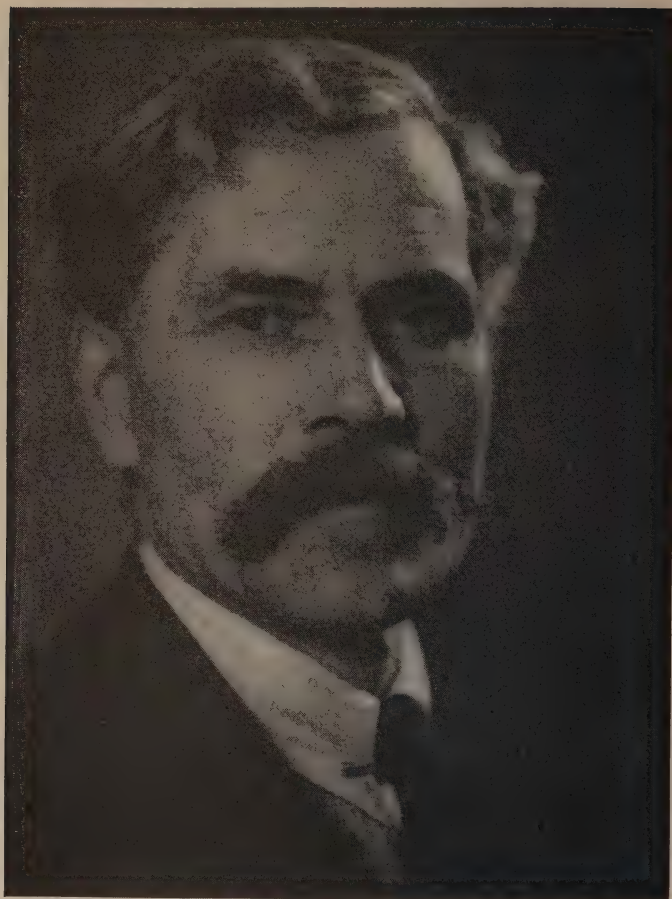
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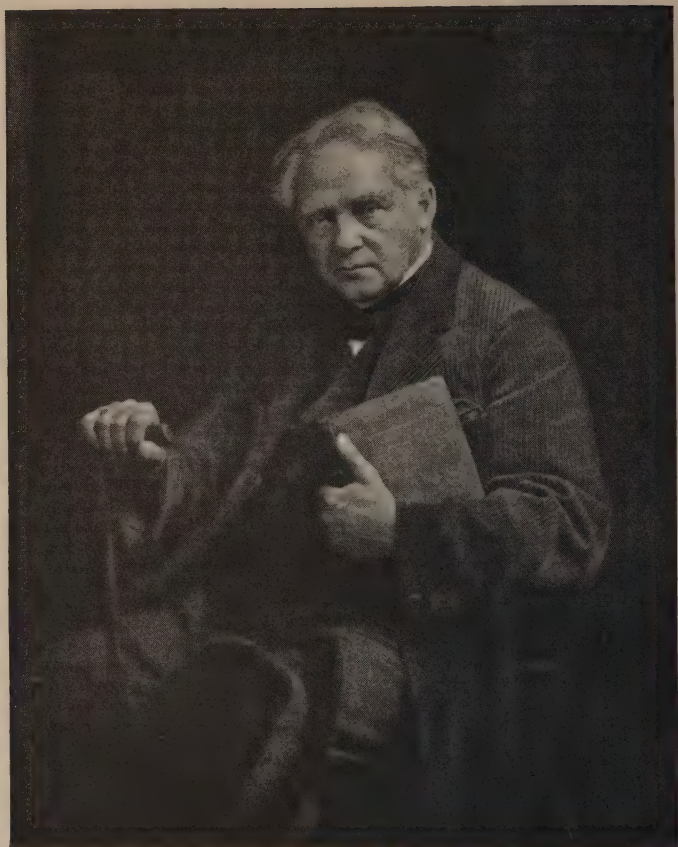
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The Photo-Miniature

A Magazine of Photographic Information

EDITED BY JOHN A. TENNANT

Volume XVII Sept.-Dec., 1924 Number 195

The Technique of Portraiture

The time is ripe for a reconsideration of photographic portraiture. With a prosperous and intelligent public generously appreciative of good work, with prices higher than ever before in the history of photography, and an unaccustomed amount of self-indulgence resulting from this combination, we have become smugly complacent about it all—with the inevitable lowering of ideals. Photography has made great advances during the past quarter century; not only in achievement, but also in the betterment of sensitive material, light equipment and the photographer's tools. The professional photographer, in keeping up with the procession, has perhaps become confused in his thinking. And as a man thinketh, so is he—or words to that effect.

We have heard a great deal, too, in these last few years, about the business side of photography: of modern business methods, cost finding systems, quantity production, management and overhead; of "psychology" in the training of the "receptionist," and in the work of field "solicitors" operating by telephone and personal interviews, "invitation sittings" and many other schemes for increasing the

volume of business. And we have seen a vigorous development of special devices giving "fancy lightings" and for obtaining soft-boiled effects, with Heaven knows what other mechanical aids to "efficiency" and "results" in the "portrait business." All good in their way and proper measure, but evil if overdone, and fatally evil if they confuse the photographer as to the only real foundation of success in his profession, which is the steady output, year in and year out, of good portraits.

Are these things being overdone? I think so. We see a lot of good portraiture today, here and abroad—especially abroad. But considering our advantages, there is far too much miserably bad portrait work being turned out of our studios from coast to coast. And much of this bad work seems to come from studios most clamorous about their up-to-dateness in methods and equipment. Too many photographers are making photographs instead of portraits of their clients. Too many photographers are over-trained in the technical side of their work and in "business psychology," but lacking in skill in portrait technique—the vital thing in their profession. The progress of recent years, in fact, has been so completely commercial and mechanistic in character, that many photographers have wholly lost sight of the art of portraiture, as distinguished from the technical manipulation and business methods employed in its present day practice. And yet, it is increasingly plainer every day: the easiest and surest way of success in portrait photography as a profession (or business if you will) is a mastery of the art of portraiture.

Confusion. As an example of this confusion in thinking, I quote from an article entitled, "What the Receptionist Should Be," recently published in a professional journal of wide circulation. "A receptionist does much more than greet the customer and mention weather conditions. . . . The receptionist must have the knack of drawing out

the best expression, of putting the client at ease, comfortably and imperceptibly (sic), and of directing the choice of the pictures best suited to the subject." Ye gods—the receptionist! "You know," continues this fatuous person, "people have no idea what they look like. No really. They see themselves when they are dressing and that is about all; and nobody carries that same expression around all day. . . . We talk to them and draw out their personalities. We try to catch the intangible atmosphere which surrounds every personality—the best qualities of that atmosphere."

And then, suddenly, the cat is out of the bag in this choice bit of wisdom: "A receptionist has to be a judge of human nature to the extent of avoiding such blunders as suggesting the eighty-dollars-a-dozen sort to the person whose limit is thirty dollars." This is "applied psychology" in photography!

Befuddlement. Can you imagine confusion worse than this? And yet it is quite in keeping with the grave recital by a photographer at a recent convention, that wherever possible he made portraits only by appointment, the social and financial standing of the prospective sitter being investigated and card-indexed in the interval before the sitting, so that when the sitter actually reached the photographer, he or she carried a "sitter's slip" or ticket, marked, among other details, with mystic symbols such as "G. L." (go the limit) and "N" (nix, no good,) for the guidance of the "operator" as to the number of plates to be exposed, in view of the possible order from the sitting. The thing is incredible.

More "Psychology." In this same photographer's view a knowledge of character analysis was most useful. He "devoted two hours a night to studying psychology, character and phrenology." But he spoke as if he used this knowledge only "when the sales girl made a miscue," first to

enable him to size up the order possibilities in the sitter (again as a guide to the number of plates to be exposed,) and then to help him to get the "kind of pictures that would please his sitters" even though, as portraits, they shamed the Father of Lies himself. Surely some photographers need to "debunk" themselves.

Art. I am well aware that the mention of the word art in connection with professional portraiture will arouse a smile in some and a protest in other readers. Art is the right word, although it has been sorely misused among us. There can be no evasion of the fact that portraiture is an art, whether we use photography, painting, sculpture or a stick of charcoal in its practice. And as for art being an obstacle to success in photographic portraiture as a business, the facts are plainly the other way. Look around you in your profession. It is undeniable that such men as Pirie MacDonald and Hollinger, to mention only two out of a dozen American photographers, with William Crooke, A. Swan Watson, Herbert Lambert, Furley Lewis and many others in Europe, are following portraiture as an art with conspicuous success. Art, in fact, pays today, even in portrait photography.

Perhaps we are thinking of different things. I am speaking of portraits, not of photographs. Although many photographers do not perceive it, there is a world of difference between the two and, for some I have known, the first step towards success has been a lively appreciation of this difference. By the art in a portrait I mean simply the quality of the portrait as a portrait; that which distinguishes the portrait from a photograph. Nothing else. Why do people come from the four corners of America to enrich Pirie MacDonald and Hollinger, here on Fifth Avenue, New York? Not for the quality of their photography, which is probably no whit better than yours, but plainly for the quality of their portraits. The public is by no means as blind as some of us imagine it to be.

In the work of these men the public sees, as Sir Sidney Colvin expresses it in his recently published "Memories," "Instead of the arbitrary imposition on the sitter of some accepted and more or less abstract type of feature or expression, a search for and insistence upon something characteristic which is really there (in the subject,) and which by sensitiveness of seeing and rendering can be made to yield a result human and pictorial in one." That "sensitiveness of seeing and rendering" is the art of it.

Man and Machine. The photographic portrait is the product of a man and a machine. Photography, the process, or the camera, as a machine, is simply the mechanical means of representation. As such, it is unrivalled in its capacity for giving a truthful representation of natural objects, both as regards the delineation of form and light and shade. So, in photographing inanimate objects a practical knowledge of the manipulation of the process is sufficient for the purpose, and in the technically good photograph we have a truthful representation of the collection of shapes and tones which make up the appearance of the subject. But in portraiture we are after something more than the outward appearance of the subject. We are dealing with human personality and must secure likeness, a clear and convincing expression of the personal identity of the subject. This is the vital part of portrait technique, which is more than mere skill in the photographic manipulation.

A portrait is more, much more than a photograph, which, as Pirie MacDonald says, gives us only a map of the face, a detailed catalogue of the features. In making a portrait, he continues, it is the man or woman behind the face that we must know and see, invite to the outside and put into the portrait. We have a good example of this in the portrait of Dr. Otto Schlapp, by A. Swan Watson, reproduced in this issue. The original print exhibits a faultless photographic technique,

but this is submerged and lost sight of in the supreme interest of the portrait, the personality of the man portrayed. This is as it should be. It is a wonderful piece of work.

A Portrait, says Webster's "Unabridged," is a likeness, resemblance; a graphic or vivid delineation of a person. Note that this definition does not include the word photograph as a synonym for portrait. This is significant, because the notion is common, especially among photographers, that the two are synonymous; that a photograph of a person is *ipso facto*, a portrait of that person. On the other hand you have the persistent complaint of the photographer's patrons: "Yes, it is a good photograph, but not like me." Webster's definition does imply, however, that a photograph of a person may be a portrait of a sort: a good portrait in the degree that the photograph evidences the qualities of a portrait; a bad portrait in proportion as it lacks these qualities.

Good and Bad Portraits. I use these homely adjectives deliberately, as expressing the commonly accepted standards by which photographic portraits are judged in everyday life. Have you ever noticed that the terms "artistic portraits," "portraits of distinction," "pictorial portraits" and the like are used only by photographers? The ordinary man or woman invariably speaks of a portrait simply as good or bad. It is too personal a thing for a compromise in terms. A portrait is either a good portrait or a bad portrait. If the reader is in doubt as to the sense in which the words are used, let him look up the half column of fine print in which Webster defines the word "bad," turning for contrast to the full column defining the word "good," and take his choice. A portrait, then, is a revelation of personality, with likeness or resemblance to its original as its vital quality, lacking which it fails to fulfill its end, loses its chief interest, and is unworthy of the name. A good portrait is one which, first of all, is adequate for

its purpose as a likeness, excellent in its proper form as a delineation of personality and character, and a pleasing representation of the personal identity of the subject. Contrariwise, a bad portrait is one which, as fragmentary or incomplete, is inadequate for its purpose, defective in likeness; which fails to convince us in its representation of the character of the person, or is displeasing or offensive—as a caricature.

A Good Portrait is without money and without price, the *alter ego*, the very resemblance of our most precious self. As Theron W. Kilmer, himself a portraitist of no mean ability, puts it: "If I were going to have my portrait made, I would insist, first of all, that it must resemble me; it must look like me; it must take the place of me when I am away; it must be so much like me that everyone who knows me, and especially my nearest friends, will remark on seeing it, "Well, that's Kilmer, all right." The significance of this lies in the fact that ninety out of every hundred persons who go to the photographer for a portrait want precisely what Dr. Kilmer describes. Look from this viewpoint at the work of the most successful portrait photographers of yesterday and today, and you will agree with the statement that success in photographic portraiture as a business has its surest foundation on the quality of the portrait—as a portrait.

It is true that some photographers achieve success, of a sort and for a time, by sheer salesmanship in selling photographs of persons as portraits. These sometimes boast of their ignorance of photography and art, pointing to business ability as the one thing necessary. But this is success in salesmanship, not in portraiture, and from the public's view of the matter, not far removed from obtaining money under false pretences. As to which Abraham Lincoln once said something worth remembering. The public goes to the portrait photographer for a portrait, and

has an uncanny way of insisting on the point. Why not give the public what it wants?

What is Truth? Do not imagine that in this insistence upon truthfulness of resemblance or fidelity of likeness in the portrait, I am unreasonably demanding that literal truth which is sometimes painful. We are all human and no one, at least since Cromwell's day, wants a portrait which openly parades faults or defects of features or character. Certainly not. A portrait is not an inquisition. Photography, the process, is pre-eminently literal and realistic in its rendering of fact, and the better the photograph, the more literal is its rendering. If used without art, i. e. without feeling or imagination, it presents the good and the bad in the subject with equal force and facility. This, by the way, is often the underlying reason why a good photograph of a person is unsatisfactory as a portrait, and a fruitful cause of re-sittings. A good portrait, in the minds of most men and women, must be a pleasing portrayal of the best and most desirable aspect of the subject, which blends mercy with truth, and softens or hides fancied or real defects. Certainly. Make portraits which will please your sitters, insisting upon personality and character, but expressing these in their most pleasing aspect. Skill in photographic technique here plays its proper part, supporting the finer and more subtle technique of portraiture. So there may be need of subordination or suppression of detail, the softening of harsh and insistent definition, a deliberate search for something of beauty and charm, and a balancing of light and shade to secure the aspect or effect which we feel necessary or desirable in the portrait. The point is that likeness must be kept all the way through, the technical manipulation being directed, not to falsify truth of resemblance, but to subordinate the force of whatever is undesirable in the portrait and to accent the most pleasing aspect of the subject.

Examen. With these things in mind, it may now be profitable for you to look at your own portrait work, judging it by this single standard, in the commonly accepted meaning of the everyday words your sitters use in speaking of the portraits you make of them. Forget, for the moment, your undoubted skill in technical photography. Gather together a few portraits of men and women you know intimately—father, mother, wife, or yourself. Are they convincing in this vital quality of likeness, really satisfying as pleasing representations of the personalities they portray, graphic and vivid in their delineation of character? Or do they merely suggest, failing to convince, as vague, fragmentary tales, bungled in the telling? There need be no hesitation in this self-criticism of your work. A good portrait, that is one which combines likeness and character, is recognized as such at the first glance, whether we know the original or not?

Great Portraits. Since few of us are as yet "collectors" of notable examples of photographic portraiture, we will now turn to the masters in portrait painting. Take from your collection of reproductions a few of the world's great portraits; let us say the portraits of Juana de Miranda and Phillip IV of Spain, by Velasquez, of Helena Fourment, by Rubens, the Marquise de Jancourt, by Vigée LeBrun, that of James Wardlow, by Raeburn, and Whistler's portrait of his Mother. Why are these counted as good or "great" portraits? In what lies their compelling interest and undeniable charm? First of all in their quality as revelations of human personality—the supreme interest in life. We cannot question their convincing evidence of the personal identity of their originals. They make us feel as if we were in the very presence of those they portray, so instinct are they with life and character. And second, in their quality as works of art, they satisfy and delight us as showing a complete mastery of the technique of portraiture.

Pointing the Argument. Do I hold up too high a standard in setting these great portraits before you? No. Photography as a medium of expression, and in the hands of an artist as rarely skilled as were these painters, is fully adequate for the producing of portraits as good as any of these. Witness the examples of portraiture recently exhibited by Alfred Stieglitz, N. Luboshez, Dr. H. B. Goodwin, and the first series of "Men of Mark" by Alvin Langdon Coburn. I recall Furley Lewis quoting an English portrait painter of repute as commenting on a portrait by Pirie MacDonald as "Like a fine Raeburn," and then going on to this photographer's portrait of "Captain Nelson," comparing it with the "King Philip" by Velasquez in its flesh quality, its plastic envelopment of muscle and, most elusive of all, the inner man looking through the fleshly envelope. The high praise which several American painters have given to the remarkable portraits of women by Charles H. Davis offers further evidence on this point.

The photographic portrait, to be sure, lacks the impressiveness of size and space, and the charm of color which these painted portraits possess. But these are not essentials in portraiture. And, as photographers, we need not look beyond the little black and white reproductions before us. The point is that if you will get in your portraits the living, vibrant quality of likeness, the vivid interest and charm of personality, and show the same mastery of technique which you see and admire in the great examples mentioned, there need be no fear as to public recognition and appreciation. Perhaps I can put this more concretely in the terms of modern business by saying that, the better your portraiture, the larger will be your success and the greater your reward in dollars and cents, leaving name and fame out of the question. And the more the man himself, and the less the machine and method are seen in the work, the better it will be for his reputation

and bank account. This, I am sure, is amply proven by the success of those photographers who, working along these lines, have made and are making the best portrait work of yesterday and today.

A New Beginning. There is a story told of Duhrkoop which comes in here. Like many American photographers of today, Duhrkoop found himself so engrossed with the business side of photography, and so continually occupied in the search for novelties to attract and hold his public, that life became just one thing after another and he was simply a man operating a machine. There seemed to be no time wherein to do justice to himself or his clientele. He rebelled. Apparently he thought the situation over, somewhat on the lines we have already discussed, and came to the wise conclusion that portraiture as an art offered a simpler and surer way to happiness and success than the way he had previously pursued. He closed the studio for a few days, putting an announcement in his display window about as follows: "We have been altogether wrong. In future we will make portraits in a new and altogether different way, which ensures a pleasing likeness and artistic effect." In that pause of a day or two the studio was stripped of all unnecessary apparatus and accessories and refinished in the manner of a room in a well-to-do home, methods of practice were simplified, styles were reconsidered, and the conventional reception room methods replaced by a home-like welcome and atmosphere calculated to win the confidence of visitors. Duhrkoop made a new beginning as a portrait photographer. Of his subsequent success and international fame there is no need to speak. This story could be duplicated, as to its essential details, by outlining the career of a well-known American photographer, but I refrain.

These men realized that in photographic portraiture we have what is virtually a monopoly in

the supplying of a worldwide necessity of universal human appeal—the portrait, and that the man who can satisfyingly supply this necessity will have no use for the brass band methods of the highly competitive business. So it is with all who are in rebellion against the over-commercializing of the profession, with its attendant evils. There may have to be a new beginning. We must get back to first principles. We need especially a broader and keener appreciation of the technique of portraiture, by which I mean simply the artist's way of making a portrait, rather than the purely technical methods employed in producing a photograph. It is for this reason that I have thus far insisted upon the difference between the two things—portrait and photograph, and upon a clear recognition of the fact that portraiture has a technique involving much more than the photographic processes employed in its practice.

The Technique of Portraiture begins in and with the photographer himself, in his self-preparation for the particular work he proposes to do. Whether the photograph will be a portrait or merely a photograph is determined before the exposure of the plate or film: not so much by the arrangement or lighting of the subject, or the choice and disposition of background and accessories (of which you may be thinking,) as by the photographer's ability to obtain a pleasing and characteristic expression of the personality of the sitter. This is the work of a man, not of a machine or process. Technique, as Webster says, is the method or style of performance in any art. And, as another tells us: style is the man. The chief part of portrait technique is in the interplay of personalities, the reaction or response of the personality of the sitter to the personality of the photographer. You cannot express the mind, character or personality of your sitter unless you see it in the subject, before the camera. I recall a sitting with Gertrude Kasebier, years ago. We

talked of many things of mutual interest until she suddenly said: "Now I see you" and made her exposures with the explanation: "I can only give you in the portrait what I see in you, nothing more, nothing else." As Rabinovitch, whose portraits are noteworthy for their intimacy of character, says: "My problem, as I see it, is first to discover my subject; that is to satisfy myself that I see and understand him or her as an individual. Having satisfied myself as to this, I bide my time. . . . Before many minutes I catch him inadvertently in what appears to me to be a moment of self-revelation. That is my moment."

Seeing. This sensitiveness of seeing can come only by persistent self-training and discipline on the photographer's part. It is a cultural ability, a capacity for meeting people on their own level, based upon sympathetic insight and a mutuality of knowledge, interests and experience, the result of a trained observation, wide reading, travel, a continually renewed grasp of current events, an acquaintance with your own community and its special interests, and a broad understanding of human nature, of the qualities of the different types of men and women and the changing issues of their lives. The photographer should read more and get a better acquaintance with the world. In short, the cultivation of your own personality is the key to an understanding of the other man's personality, and the ability to appreciate the individuality and character of your sitters.

If the photographer is to be "all things to all men," he must, in truth, know something of everything and everything of something. Perhaps the reader may remark that this is a large order. It is. But the photographer who undertakes to make portraits has put himself to a serious and difficult work and, if he seeks success in it, must fit himself for the work he has undertaken. This is only right and just. Some photographers are asking fees for their services comparable to those de-

manded by lawyers and medical men, and the self-preparation here suggested is in no sense comparable to that required in the two professions mentioned. All that it means is that the portraitist must be a keen judge of character with a quick appreciation of personality, have a broad and tolerant knowledge of human nature, a friendly and sympathetic manner, and be ready and interesting in his conversation. That he must be master of his technical processes and manipulation goes without the saying.

Personality. Let me emphasize the usefulness of an intimate understanding and appreciation of personality, which plays so important a part in portraiture. Personality is the sum of all those subtle and indefinable qualities which constitute personal identity; which differentiate each one of us from every other. This individuality or character is shaped and molded by life and experience. It is expressed in the features and deportment and is infinitely varied in aspect, being controlled, as far as its expression goes, by the emotion, mood or mental attitude of the moment. Hence we do not always look the same, nor are we concerned, at all times and in all places, to look our best or to express our personality in the most pleasing or completest way. The majority of us, in fact, go through life wearing a mask of one sort or other, most often the mask of convention or self-repression, veiling or disguising our personalities, except when at home or among intimates, where we feel free to be and express ourselves without disguise or constraint. Most of all, by a strange perversity, do we mask ourselves before the camera. Perhaps it is only natural or instinctive, after all. Few of us can escape self-consciousness, or keep what suavity or equanimity we may possess under the continued scrutiny of a strange and coldly critical eye. And the keenly penetrative gaze of the big portrait lens, seeming to search the hinterlands of the soul of one, is somewhat

disconcerting. So, as all photographers know, the interest and charm of the sitter's personality, so unaffected and vivid in the first moments of conversation in the studio, are apt to fade from the features as soon as the sitting begins, and are replaced by a self-conscious, bored, constrained or utterly blank look, obviously fatal to the obtaining of a pleasing or satisfying portrait. We photographers are strangely unappreciative of the sensitiveness of personality to environment, and give too little thought to the difficulty experienced by many of our sitters in adjusting themselves to the unfamiliar procedure of the studio. The painter has a large advantage over the photographer in this matter, with several sittings of an hour or so in which the subject has time to adjust himself to the conditions of the occasion, and the artist can evoke the sympathetic mental attitude which is favorable to successful results.

Fortunately, not all sitters need thawing out or working up for the occasion. There are those who go through life unmasked, who are content to be themselves without pose or affectation; men who freely respond to the interest of the moment, and women who express themselves with a charm and animation which is as unaffected as it is delightful. But with the majority of sitters, camera-shyness, the constraint natural among strangers or unfamiliar surroundings, the desire to play a part and appear other than themselves, or the instinctive resentment of scrutiny and observation, call for all the photographer's resourcefulness and tact.

Intimacy. Here the photographer needs first to put the sitter at ease, to create an atmosphere of intimacy or friendly relationship between the sitter and himself, thus opening the way to unconstrained self-expression on the part of the sitter. Conversation is the obvious means of this becoming acquainted, and this should pass lightly from one

topic to another until it is seen that the interest of the sitter is awakened. This is the photographer's opportunity and he begins to see and know the personality of his subject. Then, and not until then, should he give thought to the lighting which will give the most pleasing revelation of the personality of the sitter, the arrangement or composition of the portrait which will help in the characterization of the subject, and the other necessary technical details of the sitting.

Exposures should be made, as far as possible, without the sitter's knowledge. If the interplay of personalities which is the natural outcome of a well directed conversation is skilfully handled, the natural pauses in conversation will afford abundant opportunities for exposures, until the photographer is satisfied that he has obtained what he seeks. The usefulness of this capacity for making exposures unawares, so to speak, cannot be over estimated as an aid to securing naturalness of expression. When, after elaborate preparation, the sitter is abruptly told to "Hold that" or is asked to "look about here," the place indicated being an empty space or blank wall at some little distance, the natural result is a stiffening of the features and a blank expression. Whether a long exposure should be given to obtain a synthesis of several slightly varying expressions, or a "snap" exposure to record a pleasing though transitory expression, must be determined by the photographer's observation of his subject. There can be little doubt, however, that the long exposure is conducive to likeness, and is especially desirable where a strong personality, such as that of a leader in public affairs, teachers, clergymen and so on, is before the camera. With nervous subjects and children the "snap" exposure is the only one permissible.

Simplicity. When Furley Lewis, an English portraitist of high repute, was asked what he considered to be the three main characteristics of

photographic portraiture, he replied: Simplicity, truth and harmony. Photography, he explained, gives us with incredible facility beautiful drawing, a fine rendition of light and shade, and a *multitude of facts*. So he gives the first place to simplicity, by which he means the rigid elimination of the unessential, the getting rid of the redundant, the reduction of the material before the camera to that only which is necessary to the setting forth of the life and character of the subject. Generally, at least one half of the detail of the average portrait subject, as we see it before the camera, can be dispensed with to the advantage of the portrait. This means simplifying the lines and shapes of the arrangement, not only in the figure, but especially in the background and accessories. Remember that every line and shape says something—good or evil, either helps or hurts the composition. Hence the surroundings, as well as the exterior and interior lines and shapes of the figure, the forms or lines of the background and the details visible before the camera, should be carefully observed, everything unessential being eliminated or softened (subordinated) in the lighting of the portrait. Do not imagine that the use of a soft focus lens is a sovereign remedy for the over elaboration of detail in a portrait. Such a lens does, of course, soften the harsh outlines, and is useful when we have to deal with the wrinkled face of age, but may give us a general fuzziness of definition throughout, which may or may not be desirable. Where unessential or undesirable detail cannot be eliminated, the proper way to handle it is to subordinate it in the balancing of light and shade in the portrait. Notice how cleverly this is done in the portrait of Dr. Otto Schlapp, already mentioned.

Concentration. In the portrait the interest is almost invariably concentrated on the face and features of the subject. Here we want details, firmly expressed, i. e. without either fuzziness or

wiry hardness in line and form. But even here the subordination or suppression of useless detail should not be lost sight of. Do not confuse one thing with another. Keep the simple, basic idea of portraiture before you at all times, the portrayal of the character and personality of the subject. Especially in artificial lighting it is fatally easy to over-elaborate or over-emphasize the petty, unessential details of the face and figure.

That likeness does not depend upon detail may be proved by our instant recognition of anyone we know, even when far distant, so that the features are neither defined nor seen in any detail. Likeness will be found to lie more in general form and the masses of darks and halftones; the eye, taking in the form at a glance, assists the imagination in completing the resemblance. The extreme darks, and their distance apart, are greatly conducive to likeness, as is also the marking of the points where the highlights fall, particularly on the forehead, nose and cheek-bone. By the presentation of too much detail, or its emphasis by concentration applied in the wrong place, breadth is lost and likeness easily loses its force. The concentration of interest is best secured by avoiding an excess of detail, and broadly merging the lines and forms so that they flow into one another instead of being too insistently defined. It is this concentration which gives the quality of comprehension to the portrait, the key to a sympathetic appreciation of the personality of the subject, on which the interest and pleasure we have in a portrait is largely based.

The Lighting of the subject in portraiture is next in importance to the obtaining of natural, unconscious self-expression on the part of the sitter. Here, however, you work "on your own," independently of response on the sitter's part. You must know what you want and how to get it in the negative. If you work from the viewpoint that your lighting has the simple purpose of combining

likeness with the most pleasing aspect of the subject, the problem will be enormously simplified, and you will not be misled into an effort to obtain technical or conventionalized effects.

It is impossible to teach portrait lighting in a book. It has its principles and these should be known; but the application or use of the principles calls for demonstration, and facility can come only from practice. Here we can only discuss the bare elements.

The first requisite is an adequate volume of light; the second, a simple but certain method of controlling the light; and the third a complete knowledge and mastery of the obtaining of a wide variety of effects. There should be no experimenting or fumbling with the subject before the camera. Lighting is your job. Know your job. Have plenty of light for the work in hand, and train yourself rigorously in its control and use.

I recall a visit to Pirie MacDonald with a question as to his methods of lighting. He led me into his studio, pointed to the light equipment hung well up on a side wall and then to a comparatively small, screened bit of floor space within which the sitter is comfortably seated, and said: "There you have the whole story. You know my work is chiefly heads and half-figures of men. The only secret is that I know my light, and I know every possible capacity and effect of my light within my working space. Of course you must know your sitter and what you want before you begin. I could not tell you more if I talked a month."

Men. Speaking generally, portraits of men should exhibit largeness of view, vigor and breadth of treatment. Of course there will always be exceptions, and the degree in which these qualities are expressed in the portrait will vary, being tempered by the characteristics of the individual, e.g. his physical or mental alertness, etc. The desire to be thought of as "a strong man," commonly attributed to all men, makes virility the surest quality

to put into this class of work. Compare, as to these points, the portraits by Lionel Wood, Hugo N. van Wadenoyen and A. Swan Watson, among the illustrations of this issue.

Commonly these effects are gained by degradation of the planes of distinctness, with loss of detail, in the effort to avoid spottiness, which is inconsistent with breadth. This method, however, often results in a deplorable loss of values, especially in the shadows, and a lack of tone differentiation in the background and the contours of the head or figure which should give roundness of form. Interest and dignity are best secured by a reasonable firmness of definition in the head and face (and in the hands, if shown), combined with breadth in the general treatment of the figure and large masses. This is a matter of illumination, by which certain parts of the portrait are made less visible or less assertive, as in the portrait of Dr. Schlapp. Loss of form, however, is inexcusable, and empty shadows or dark spaces without differentiation of tone, even when representing dark clothing or background, are a confession of failure in photographic technique. This fault is very common. The photographer should remember that he is working in monochrome, and cannot offset loss of tone and detail by the interest of color as the painter does. The luminosity of the portrait and the subordination of detail belong to illumination, and the balancing of light and shade with correct exposure. The definition of the shapes and lines making up the arrangement, together with the drawing of the portrait, depend on the handling of the lens employed and its focal length, rather than on the type of lens used.

Character, individuality or personality should, of course, be the dominant note, the business man, the scholar, ecclesiastic or plain nondescript being differentiated in this note as far as the subject is typical of his class. This indication of the particular type, however, is not always possible in the

large head portrait now so widely favored. So many bishops of today are and look like keen business men, and so many men of business look like bishops! This, I sometimes fancy, is why Pirie MacDonald so invariably presents the quality of virility in his portraits of men, often "verging on brutality" as Furley Lewis bluntly expresses it. In half or three-quarter figure portraits, however, the type can often be accented by the dress, or by the introduction of something appropriate to the type, e.g. a chart in the hands of a naval officer, the telephone near the journalist or editor, or the book in the hands of the scholar—as in the portrait of Dr. Schlapp.

Women. It may be profitable to recall a visit to another studio dealing with quite another class of subjects, that of Charles H. Davis, whose specialty is portraits of women. "What about your methods of lighting?" "Well," was the reply, "my aim in making a portrait of a woman is to get likeness, to be sure; but with this I insist on as much feminine grace, charm and beauty as is possible. This, generally means adding artistic effect in the pose or arrangement of the figure, giving special attention to the coiffure and the hands, and in so lighting the subject that every good point is enhanced and every blemish or defect softened or eliminated.

"Especially in the lighting of the head and in the balance of light and shade in the composition of the figure, it is possible to import or convey in the portrait the grace of line, the subtle gradation of light and shade, and the charm of interest and animation which means so much to a woman. You must have plenty of light, well diffused and perfectly controlled, to avoid harsh contrast or hardness of effect and to get that softness and plasticity essential in this class of work. For special effects, as in accenting the individuality of the sitter, and to illuminate the shadows, a

small-supplementary light is sometimes useful; but the indiscriminating use of the spotlight so evident in much portrait work today betrays the experimentalist and is destructive of the quality of unity."

Freak Lightings. Whether the source of illumination be daylight or artificial light, or a combination of the two, is of little moment. All that is possible with the one is possible with the other. In spite of which it is plain that the general use of artificial light in the studio—point light, area light and spot light—has brought about a radical change in the portraits of today as compared with those of a few years ago. The old traditions of simple and direct lightings seem to have been abandoned, and in their place we have a startling variousness tending to theatrical and motion picture lightings hardly appropriate to everyday use. It is another proof of the confusion in thinking already spoken of, and of the following of novelty without rhyme or reason. Whatever may be said in favor of the freshness and variety of present day lightings, it is undeniable that they give the portrait a momentary instead of permanent value. There is too much sophistication, with a loss of directness and simplicity; too much mushy softness and loss of firmness in the modeling, broken by erratic and abrupt light patches without modulation and detail. This, however, is due to the misuse of artificial light systems; properly understood and handled with intelligence they offer definite advantages.

The Best Method. It was settled long ago and now beyond dispute that a simple and direct lighting, from a single source in front of, at the side, and slightly above the subject, is that best calculated to give the head and face the proper or most desirable illumination in a portrait. In this method the variation of the volume of light and its direction, of the degree of front or side lighting, and its easy control, we have a perfectly

adequate means of representing the head and face of the subject whatever its variation or defects of structural form. And it has the great virtue of being simple and easily mastered. With this method, too, one does not easily lose the proper projection of the head and features, the lack of which is one of the most common faults in modern portraiture, and one avoids the evil of cross lighting with its shadow band down the centre of the face, drawing the eyes together and giving a sinister cast to the sitter's aspect which is fatal to a pleasing portrait. In portraits of women and children a soft front lighting gives delicacy of gradation and luminous shadows.

For a last word: beware of reflectors and reflected lights. The roundness and force of the portrait depends on the strength and richness of its shadows.

Posing. Of the pose in portraiture little can be said here. It is too big a subject to deal with in a couple of pages, and, as with lighting, needs demonstration with the model under the light for effective teaching. But there is this to be said: do not be misled by the oft-repeated statement that posing is unnecessary, or at best a necessary evil.

Whether the portrait be a simple head or scant half-figure, or a full-length figure, we have a collection of lines and shapes, and the placing of these within the picture space, which itself has shape and proportion, calls for a pleasing arrangement or design. This is the composition of the figure, as necessary as the proper lighting of the portrait.

It will not do to "let the sitter pose himself" especially if the sitter is herself. Moreover, by the placing of the head or figure and the disposition of its lines and shapes, the characterization of the subject can be enhanced and likeness accented. So, too, by carefulness of pose or arrangement, it is possible to minimize or subordinate physical defects. In any arrangement of lines and shapes within a space, there are things to be avoided as

well as things to be done in order to secure the most pleasing effects in the presentation of the subject.

Especially is this true in portraits of women, in which grace of line and form are quite as essential as likeness. Women are by nature more appreciative of the decorative side of life than men, and the photographer who aims to succeed in making portraits of women will find himself obliged to get as much decorative quality into his work as possible. This means the continual study of and drill in the composition of the figure, and the more consummate the photographer's skill in posing and arrangement the better. More particularly must he acquire a keen sense of beauty of form, so that by pose or arrangement and skill in lighting, he can enhance whatever physical charms his sitters possess, and correct or hide or minimize their physical defects.

This applies to the treatment of the hands (and arms, so long as the sleeveless dress is in fashion), the obtaining of or suggestion of better proportions in short or mis-shapen necks or excessively wide hips and the like, the use of "drapery" to help an awkward figure and so on. Descriptive details in this do not make for pleasant reading, but even with skill in pose and lighting, there is often need for an appalling amount of "after-treatment" in portraits of women. I recall a thoroughly good portrait of a well-known operatic star, admirable as a likeness and as an example of figure composition. An inspection of the negative showed that the retoucher had removed at least fifty pounds of solid flesh from various parts of the figure. The first order from the proofs was 250 eight by tens.

If the reader can lay hands on copies of THE PHOTO-MINIATURE, numbers 2, 64, 95, 109, 136, 165 and 172, together with Sidney Allan's "Composition in Portraiture," he will obtain a very complete discussion of the whole subject of posing the figure

in portraiture. These books are out of print, but may be consulted at most public libraries, or odd copies may be secured at second hand by diligent search and at a price. They are all well worth the search and the price.

The Lens plays an important part in portrait technique, and deserves a more careful study than is generally given to it by photographers. Its focal length, rapidity and definition are the vital points to be considered, rather than the particular type of lens and the name or fame of the maker.

Focal Length. There is much needless confusion in the minds of photographers as to the influence of this factor in portraiture. Possibly this confusion arises from the fact that lenses are usually discussed with reference to the representation of more or less distant objects, on a much reduced scale, in unrestricted space out of doors; whereas in portraiture we are concerned with the delineation of objects comparatively near the camera, on a relatively large scale, and in restricted space—which is quite another story.

In this respect portraiture is more akin to copying (reduction) than to general outdoor work, and a knowledge of the rules of conjugate foci will be found as useful in the one as in the other. These rules, as most photographers know or should know, have to do with the distances between lens and object and lens and image in copying (reducing) an object on a pre-determined scale, the distances varying with the focal length of the lens used and the scale on which the object is being reproduced. In portraiture this has an obvious application in finding the minimum focal length of lens required for any given size of head or figure, the camera extension required for a lens of any given focal length, and the maximum focal length of lens which can be employed within the working space or length of studio available.

Focal Length and Scale. The focal length of the lens determines the scale or size of the picture—

image. From a given viewpoint or object distance all lenses of the same focal length give images of the same size, regardless of the type or construction of the lens or the size of the aperture or stop used. The greater the focal length of the lens, the larger is the image, provided that the object distance remains unchanged. Since the scale of the portrait is generally a pre-determined thing, and the maximum working space or choice of object distance is often restricted or limited, this controlling factor of focal length is important.

In practice this means that to obtain a 3-inch head portrait, with a lens of say 10 inches focal length, it will be necessary to work much closer to the subject than is required to obtain an image of the same size with a lens of say 20 inches focal length. And there will be an easily observable difference between the two portraits. In that made with the 10-inch lens we will note an apparent distortion or lack of proportion in the relative size of the features, the nose, mouth and chin being rendered disproportionately large compared with the forehead, eyes, ears and back of the head. In the portrait made with the 20-inch lens, on the other hand, this distortion or faulty "drawing" of the features will not appear, and the perspective rendering will be natural and pleasing.

Perspective Rendering. From experiences of this sort, the fault being a common one in photographic portraiture, photographers have come to associate distortion in the portrait, or perspective rendering generally, with focal length. This is a mistaken notion, a putting of the cart before the horse. The perspective given by the lens is always correct from the viewpoint chosen, however unfamiliar or absurdly queer it may seem to us in the photograph. In the instance of the 10- and 20-inch lenses mentioned, and invariably, the "drawing" or perspective rendering of the portrait is determined by the viewpoint, irrespective of the focal length of the lens. By viewpoint here is meant

chiefly the distance between lens and subject, although the angular projection and height of the camera in relation to the subject have an appreciable share in the character of the result. The difference in the "drawing" or perspective rendering in the two portraits mentioned resulted, not from the difference in the focal lengths of the lenses used (as photographers generally suppose), but from the fact that the 10-inch lens necessitated a viewpoint so close to the subject that a too-abrupt, and therefore unfamiliar and unpleasant, perspective rendering was obtained, while the 20-inch lens necessitated working farther from the subject, this greater distance between lens and subject giving freedom from distortion and a more natural, and therefore pleasing, perspective rendering. Which indicates that there is a minimum object distance or viewpoint which must be observed if we desire to obtain a natural or pleasing perspective in the portrait.

Correct Working Distance. Because our recognition of disproportion or faulty "drawing" in a portrait is largely dependent on the individual sense of proportion, or the satisfaction of an instinctive or acquired perception of what is pleasing and correct or otherwise in this matter, it is difficult to state definitely just what is the minimum distance between lens and subject, which will ensure satisfactory perspective rendering in the portrait. And sometimes the existence of certain characteristics in the subject, i.e. an abnormally small nose, a weak mouth or chin, will justify the introduction of a certain amount of exaggeration in the "drawing" of these features, as softening the natural defect—tho' "looking aslant upon the face of truth" for the moment.

It is generally agreed, however, that the minimum distance between lens and subject should never be less than 6 and preferably 8 feet, with a working space of 15 feet as the desirable minimum for three-quarter and full-length figures and groups. This

means the use of lenses with focal lengths at least twice the longest way of the plate or film used, which is in agreement with the best practice, and assures freedom from distortion and good perspective rendering in the portrait; not, however, as resulting from the focal lengths used, but from the distance between lens and subject necessitated by their use. Allowing a space of 5 feet behind the subject and another 5 feet for the camera and operator, we arrive at 25 feet as the minimum desirable length of the portrait studio.

Length of Studio. Because of the varied requirements as to scale in portraiture, i.e. large heads, half-, three-quarters and full-length figures, it is well to have at least two lenses of different focal lengths for studio use. As is well known, the maximum focal length which can be employed is limited by the working space or length of studio available. We have seen that 25 feet may be regarded as the desirable minimum in this. In such a studio a good choice would be a 12-inch lens for figures and groups, and an 18- or 20-inch lens for large heads. But I have seen good figure portraits made, with a 16-inch lens, in a studio of 21 feet length over all.

But, whether from ignorance or the difficulty of obtaining space in a desirable location, we find photographers working much closer to their subjects than these requirements specify. To this fact is due much of the distortion or bad "drawing" observed in photographic portraiture, and the source, perhaps, of the vague dissatisfaction expressed by the photographer's clients in asking for a re-sitting: "I cannot explain what is wrong. They are good pictures, but there is something—they don't look right, and I don't like them." As matter of fact perspective rendering has much to do with likeness, and therein the fault often lies. Use a lens of greater focal length for your re-sittings and see whether the difference in results (perspec-

tive rendering) will not win your client's approval.

Fallacies. Among the reasons given by photographers as justifying the use of lenses of comparatively short focal length, it is sometimes said that such lenses give more roundness and snap, with better projection and more force in the shadows than lenses of more ample focal length. This reasoning is fallacious. The qualities mentioned, when so obtained, are really the result of exaggeration in the perspective rendering, and the apparently greater depth of planes is produced by the nearness of the lens to the subject. The modeling and projection of the head and features are properly controlled in the lighting of the subject, assisted by the background tones. It is conceded, however, that when lenses of considerable focal length are used and especially in artificial lighting, the greater depth of illuminated air between lens and subject may produce an appreciable veiling or flatness in the negative.

The Height of the Camera or lens in relation to the physical characteristics of the subject is important, and should always have careful consideration. Generally speaking, a low position gives the effect of greater height and dignity to a standing or seated figure. But it also gives undue prominence to the throat and nostrils, bends the shape of the mouth downwards and cause the forehead and back of the head to recede. On the other hand, a high position sometimes shortens the neck, brings the forehead forward, lengthens the eyes and gives prominence to the ears and back of the head. The only way of familiarizing oneself with the effects obtainable by this lowering or raising of the viewpoint in portraiture is by experiment and observation, the average height of the lens for a standing figure of average height being 5 feet and for a seated figure or half-length portrait, 4 feet.

Rapidity and Definition. The characteristics of the portrait lens, as introduced by Petzval (1841) and since improved by Dallmeyer (1866) and others,

are its abnormally large working aperture and its ability to give critically sharp definition in the center of the field. In practice these qualities means great rapidity or speed, and an exquisitely defined image notable for its modelling and brilliancy.

Until within the last few years these qualities have been considered indispensable in portraiture. Today, however, we have super-speed films and ultra-rapid color-sensitive plates, and powerful artificial lighting systems such as the photographers of twenty years ago hardly imagined, so that the necessity of extreme speed in the portrait lens is not as urgent as it was. In the matter of definition, also, a great change has come about. The portrait no longer occupies the center, but often spreads as a flat design over the whole print, and all-over sharpness is no longer thought to be perfection, soft contours and breadth of tone values being preferred. To meet this altered viewpoint the "soft-focus" lens is now considered to be indispensable in portraiture. Without doubt this type of lens has its advantages and usefulness, but it is grossly misused and the soft-focus portrait is not yet favored by the photographer's public.

Choice of Lenses. It comes then to this, that the photographer of today has a much larger freedom in the selection of lenses for portraiture than was possible a few years ago. Thus, without in any way lowering his standards of quality, or his ability to meet all requirements, he can now avail himself of two lenses (affording a variety of focal lengths) at a much less cost than the purchase of the high-powered anastigmat portrait lens of a decade ago. Such a selection would consist of a portrait lens of ample focal length, working at F:5 or F:6, with a diffusion attachment or adjustment, and permitting of the use of the front combination alone when desirable. This will fully cover the requirements for large heads and similar work de-

manding ample focal length. Failing this a "soft-focus" lens which can be stopped down when sharp definition is required may serve. For the very occasional need for greater speed and more even definition, as in the case of restless babes, "impossible" grown-ups, full-length figures and groups, an anastigmat of moderate focal length, working at F:3.5 or F:4.5 will complete the equipment at a moderate cost. This latter should permit of the use of its single combinations, thus giving two or perhaps three different focal lengths for varied needs, the complete objective being useful, also, for copying and the occasional "at home" or outdoor work.

Plates and Films. Coincident with the introduction of flat films for professional use, a marked advance has been seen in the manufacture of portrait emulsions here and abroad. As a result, the portrait photographer of today is provided with sensitive material of truly remarkable quality for his special requirements. In portrait technique these requirements are the ability to give a long range of gradation in the negative (chiefly to hold the delicate tone contrasts in the highlights and shadows of the portrait), and a better rendering of "color values," fineness of grain, and latitude combined with speed for the better handling of exposures.

The question of films *versus* plates is one which must be left to answer itself. Theory favors the thin, transparent film base as compared with glass, especially for flashlight and home portraiture, where harsh lightings and strong contrasts are encountered, as well as for the "unusual and difficult lightings" (often crudely forced and generally weird) so common in studio portraiture since the general use of artificial light systems. Despite this theoretical advantage, however, in the best practice and with normal or conventional lightings, the comparative displays of portrait negatives on plates

and films at the conventions (the work of experts) show equal abilities in plates and films for portrait work.

Color Values. As far as sensitive material and portrait technique is concerned, however, the real advance is the recognition of the influence of the color in the subject in portraiture, and the consequent, larger use of color-sensitive plates and films in the studio. In the modern way of negative-making, the chief endeavor is to extend the range of tones in the print by getting in the negative as complete a representation of the light and shade contrasts of the subject as is possible. And so far as the representation of the subject tones is minimized or lost, by the inability of the ordinary (non-color-sensitive) emulsions to register the influence of the color contrasts in the highlights and deep shadows of the subject, this defect is remedied by the use of panchromatic emulsions. I have been surprised, in a recent survey, to find how many portrait workers are using panchromatic plates and films in their daily work—without talking about it. But a comparative test of the panchromatic and ordinary emulsion results in so evident a difference in the portrait that an intelligent trial is sufficient to convert the most conservative.

Panchromatic Portraiture. Practical testimony of the value of panchromatic plates and films in portrait work is given in a recent issue of *The Professional Photographer* by a veteran Scots photographer, E. Drummond Young, of Edinburgh. Mr. Young has used panchromatic plates for the last seventeen years and is enthusiastic as to their advantages in everyday portraiture. And in a recent issue of *Studio Light* there appeared an account of the work of Charles Erwin Arnold, of Dallas, Texas, with a few remarkable examples of panchromatic portraiture or "Pan Portraits" as Mr. Arnold calls them. Of the work of these photographers and their experience with panchromatic material

I hope to write more fully in an early issue of *THE PHOTO-MINIATURE*, since my space here is exhausted.

Development. In earlier days the developing agent used, the proportion of bromide in the developing solution, and the method of developing the plate occupied an important place in the thought and work of the portrait photographer. Modern research has changed all that, and it is now generally recognized that the development of the portrait negative is more or less automatic, having for its sole function the fitting of the densities or tones of the negative to the printing paper to be used in making the print. As a result the photographer of today sticks to one make of plate or film, and follows very closely the instructions of the plate maker as to the developer and method of development to be employed. So, in keeping with the long scale emulsions of the plates, films and papers used in portrait work, we find pyro most widely in use as the developer possessing the greatest elasticity and most easily controlled as to color, and tank development as the method of developing portrait negatives, offering the largest control in timing the development, and giving the printing quality most desirable for the paper in use.

In this scheme the exposure is calculated to just record the shadow detail in the subject, which ensures that the negative will reproduce the different brightnesses or light intensities of the subject in correctly proportional densities, the time of development regulating the distance apart of the tones or densities, according to the tone reproduction capacities of the printing paper.

The End. Here we must draw to the end of our discussion of portrait technique. Of necessity more has been left unsaid than said. But I have tried to emphasize the essentials proportionately to their importance, and especially to point out what, in my opinion, is a destructive tendency in photo-

graphic portraiture as a profession today.

Let no one think that this getting back to first principles—to the making of portraits instead of photographs, means a shrinkage of business, or the changing of the business into a one-man, highly individualized concern with a small turnover at high prices. Not at all. Experience shows that such a scheme is utterly unsuited to the majority of photographers and inapplicable in many localities.

The natural result of the change herein suggested will be an increased volume of business; but based on the wider and surer appeal of the different quality in your work, and on the greater pulling power of giving the public what it wants, rather than on the use of intensive business getting schemes and psychological tricks employed in current practice to "sell" or "put over" the pretty or clever photographs offered as portraits.

With your own change of viewpoint in your own work, however, there may have to be changes in the viewpoints of the "help" employed in the business. Use your knowledge of "psychology" on your assistants as well as in dealing with your sitters before the camera. The receptionist, especially, should be made to realize that "the public be pleased" is a better rule than "the public be teased" in getting orders; that the public is (by this time) suspicious of being "worked" or over-persuaded, and inclined to resent the play of over-much "psychology" in so simple a matter as getting a portrait. The darkroom assistant may have to be trained to keep, in the development of the negative, the points and effects you have secured in lighting and exposure as helping or accenting the characterization of the subject, i.e. as to the range of tone values in relation to the exposure scale (new name for gradation capacity) of the printing paper to be used. And the retouching department may need careful supervision, until your assistants in that department understand that they must not

undo your work in securing likeness in the portrait. Of course, in retouching portraits of women, the quality of mercy must often be considerably strained in its blending with the truth, and every note of charm or beauty kept, short of loss of likeness. But this strain should be lifted from the retoucher as far as is possible by skilful work under the skylight. All studio lightings, however, and the general use of color-blind plates, tend to exaggerate the signs of age and defects of features and skin texture, as to which women are abnormally sensitive. A close working together on the part of photographer and retoucher in this class of work is suggested as the surest way to success.

An old photographer, reading this over my shoulder as I write, suggests that I have overlooked the exception which proves the rule as to likeness: the case of the sitter who really wants to look other than he or she really is in life. There are such cases and the answer is: give them what they want. Surely the one who pays has a right to call the tune. But the rule stands fast. Ninety out of every hundred of the photographer's customers want a portrait—maybe a pleasing or even a flattering portrait—with likeness; which will make those who see it say: "Yes, that's Jones, all right."

The Beginnings of Halftone

From the Note Books of Stephen H. Horgan. By Lida Rose McCabe. 11 pages; 11 illustrations; 9 x 11½. Paper covers, \$1. Boards, \$1.50. Published in a Limited Edition by The Inland Printer Co., Chicago. Obtainable from Tennant and Ward, New York.

What is a halftone? Briefly, a picture in which the lights and darks or tones of the subject or photograph reproduced are defined by lines and dots of different surface areas, made through a mechanically lined screen.

The halftone photoengraving is today as ubiquitous as the printed work which it illustrates in the world's newspapers, periodicals and books. It represents an unending succession of discoveries, inventions and experiments: the evolution of a process and an industry which are among the most useful of photography's achievements.

Just when and where the halftone photoengraving process began, and to whom the credit for its invention should be given, are questions often discussed but not yet finally and authoritatively answered.

The question: Who produced and printed the first halftone used in the public press? seems, however, to have been definitely answered in favor of Stephen H. Horgan, of New York, who made and printed in the New York *Daily Graphic* of March 4, 1880 the earliest dated halftone to appear in a newspaper.

My authority for this important bit of historical information is an extremely interesting brochure: "The Beginnings of Halftone," written by Lida Rose McCabe "from the Note Books of Stephen H. Horgan."

The frontispiece of this profusely illustrated brochure is a combination halftone and line plate of 1880, reproducing the front cover of *The Daily Graphic* of March 4, 1880, with the explanation beneath that the halftone portion of the plate was made with a single-line halftone screen, because the printers of that day refused to attempt to print a halftone made with a cross-line screen on a "steam press" as something which couldn't be done. On the following page appears a same-size reproduction of a section of the "Scene in Shantytown, New York. Reproduction Direct from Nature," from a negative by H. J. Newton, at that time President of the Photographical Section of the American Institute—the earliest dated halftone printed in the public press. On another page is a cross-line screen halftone portrait of Maud Granger made by Mr. Horgan, February 14, 1880, (antedating the block from which the "Shantytown" picture was printed), which the pressmen of the *Graphic* refused to print, so that it never got further than the hand press. A third illustration reproduces a washdrawing in halftone on scratchboard, in which the artist has scratched highlights and added pen and ink lines as he wished, also made in 1880. Among the other illustrations is a sketch of S. H. Horgan from life, made by Sir Hubert Herkomer during his visit to America in 1881, when he called on young Horgan and paid him \$500 for a demonstration of a remarkable method of photo-intaglio engraving which he had invented while perfecting his halftone process. Of this Herkomer later said: "I never spent \$500 that was of so much benefit to me," but Horgan afterwards abandoned the method. A recent portrait by Goldensky, of Philadelphia, and a reproduction of "The Late William M. Chase Etching," from a pen drawing by Robert F. Blum (photographed on a zinc plate and etched by Horgan's Intaglio method) complete the illustrations.

The text gives some account of "The Dean of Photoengraving" from his birth on a Virginia plantation in slavery days (1854); of his learning pho-

tography from a Methodist minister at Nyack, N. Y., whose "photograph gallery" he bought, thus becoming at eighteen the proud proprietor of a photographic studio; his service with Bogardus of New York in 1874; his taking charge of the photomechanical department of *The Daily Graphic* (at that time the largest establishment of the kind in this country) in 1877; his later work as art director on the New York *Herald*, *Recorder* and *The Tribune* (on the latter he first introduced the printing of curved halftone plates on a fast web stereotyping newspaper press), with the American Press Association (where he pioneered pictures into the country newspapers), and of his present-day activities as editor of the Process Department of *The Inland Printer*, and author of many books on photomechanical subjects.

Dates, particulars and proofs are duly recorded by Miss McCabe, with examples of the early film line screens devised by Mr. Horgan in 1876-77 during his first years with the *Graphic*. Confirmatory extracts are given, bearing on the priority of Horgan's work, from articles by Louis Flader in *The Photo-engravers' Bulletin* and *The Inland Printer* of October, 1893, *The Daily Graphic* of March 4, 1880, *Anthony's Photographic Bulletin*, reporting the description of Horgan's halftone method by O. G. Mason at the March 2, 1880, meeting of the American Institute, New York, and the lecture on "Modern Reproduction Methods" by Charles W. Gamble, reported in *The British Journal of Photography*, April 25, 1924, in which Mr. Gamble credits "the earliest dated halftone used in the public press" to Stephen H. Horgan.

On May 28th, 1924, Mr. Horgan suggested to the New York Telegraph and Telephone Company that they could send pictures in color over a telephone wire as easily as pictures in black and white. This was tried on July 15th with a photograph of Valentino in colors from life, on a telephone wire between Chicago and New York and was successful. A detailed account of this achievement, with reproduc-

tions of the three color separation plates was published in the *Colour Supplement* of *The British Journal of Photography* for September 5, 1924.

Since the foregoing note was prepared for press Mr. Horgan's work in the field of photo-mechanical processes, here briefly outlined, has received noteworthy recognition in the award to him of the Medal of the American Institute of Graphic Arts, "for his valuable services and inventions in the graphic arts." This well-earned distinction was conferred upon Mr. Horgan at the November meeting of the Institute, held at the Art Centre, New York, the occasion bringing together a large gathering of prominent workers in newspaper, periodical and book illustration.

Books and Prints

All books mentioned in these pages may be obtained from the publishers of THE PHOTO-MINIATURE and will be forwarded promptly, postpaid, to any address on receipt of the prices quoted.

MATERIA PHOTOGRAPHICA: A Dictionary of the Chemicals, Raw Materials, Developing Agents and Dyes used in Photography. By Alfred B. Hitchins, Ph.D. 96 pages; $5\frac{1}{2} \times 8$; paper covers 50 cents; cloth \$1.00. Philadelphia: Frank V. Chambers.

A useful little book, crowding into less than a hundred pages a severely condensed description of the raw and prepared materials used in everyday photographic practice. The chemical section gives the chemical symbols, French and German names, synonyms, molecular weight, specific gravity, properties, derivation, grade and uses in photography of about two hundred items arranged in alphabetical order. A few cross-references under the common names of the chemicals in this section would have helped the reader to find things more quickly: e.g., tannin, described under Acid Digallic. Another suggestion for future editions is that the solubilities of the chemicals described be given more specifically, e.g., Potass, Bichromate, 10 per cent in cold water, in place of "Sol. in water."

The section devoted to Developing Agents describes fifteen developers, giving their chemical formulas, characteristics and trade names (here, again, cross references would have helped, e.g., Edinol: See Para-amido-saligenin); and the Dyes in current use for color sensitizing and desensitizing are briefly described with their transmission capacities. Among these I find no mention of Pinacryptol Green, generally said to be as efficient and more

convenient for desensitizing purposes than Pheno-safranine. Formulas for the preparation of light filters and a Table of International Atomic Weights complete the book, which should find a place on every photographer's bookshelf.

PHOTOGRAPHIC FACTS AND FORMULAS. By E. J. Wall. 386 pages, 5½ x 8; cloth, \$4. Boston: American Photographic Publishing Co.

Into this fat volume Mr. Wall has gathered one thousand and one (or more) facts, formulas and tables employed in the everyday practice of photography. Necessarily many of these have been published in other books or journals, but I have discovered quite enough new (to me) material to justify the price of the book, with appreciation *plus* to Mr. Wall for giving the huge collection his critical attention and making it accessible in this convenient form for ready reference. Books of this sort are indispensable to the busy worker in photography, and I know of no man living, better equipped than E. J. Wall to edit and compile such a book. Not the least of its good points is the ten-page Index which is unusually well done.

THE AMERICAN ANNUAL OF PHOTOGRAPHY, 1925. Edited by Percy Y. Howe. Vol. XXXIX. 296 pages; 171 illustrations. Paper cover, \$1.75; cloth, \$2.50. Sales Agents: George Murphy, Inc., New York.

The variety of subjects dealt with in the text and illustrations of this new volume of *The American Annual* attractively demonstrates the wide appeal and usefulness of photography as a hobby and serious pursuit. Among the many papers of outstanding interest may be mentioned "Pinhole Photography Simplified," by W. B. Kemp; "Intensification of Three-Carbro-Prints," by F. G. Tuttle; "Novel Uses for Supplementary Lenses," by A. Lockett; "Resino-

tipia," by J. Petrocelli; "The Small Camera for Studio Work," by Dr. T. W. Kilmer, who seems to have abandoned his 11x14 studio camera in portrait work; "Focusing by Parallax," by J. E. Foss; "What One Lens Will Do" (the Graf Variable Anastigmat), by C. H. Partington; "Miniature Prints by the Gum-Bichromate Process," by W. G. Shields; and "The Carbro Process," by F. T. Usher.

The illustrations include example of the work of many well known pictorialists: carefully reproduced and, for the most part, well printed.

The Photographic Formulary, Tables, and List of Photographic Societies, carefully revised to date, with a Reference Calendar for Three Years, complete one of the best volumes of the Annual published under the editorship of Mr. P. Y. Howe.

THE BRITISH JOURNAL OF PHOTOGRAPHY ALMANAC and Photographer's Daily Companion, 1925. Edited by George E. Brown. 816 pages, 5 x 7, with gravure frontispiece. Paper covers, \$1.00; cloth, \$1.50. London: Henry Greenwood & Co. American Sales Agents: George Murphy & Co., New York.

Most welcome and most useful of all the books of the year comes the "B. J. Almanac"; the Big Book of Photography, this year bringing a larger mass of information than any of the six post-war issues, the text being extended to 350 closely packed pages.

The editorial article, always a notable feature of the *Almanac*, is devoted to "The Plain Facts of Lenses," a subject which few writers can discuss more clearly or more profitably than George Brown, whose monographs on lenses in P-M: Nos. 36 and 140 are among the most sought for "out-of-prints" in the Series. "The Best With the Small Camera," by T. L. J. Bentley, is another special paper telling how to get the most out of the pocket cameras of today. The Epitome of Progress (almost 100 pages) and Recent Introductions in Apparatus and Materials

(illustrated) cover in a splendidly detailed way the most interesting papers and communications published, and the apparatus introduced, during the year.

Instead of the usual table of chemical formulas given in past issues, Editor Brown this year provides a much more readable and useful series of short articles (12 pages, double columns), dealing with the properties of the chemical substances used in photography. The section on Exposure, too, has been improved by revision and additions extending the use of the tables to countries in all latitudes, and the Formulas for the Principal Photographic Processes are concisely brought to date, which also applies to the lists of Photographic Societies, Bodies and Federations, and Photographic Books. Doubtless the Editor's characteristic modesty led him to overlook his own monograph: "Who Discovered Photography" (P.M: No. 60) in the special note on works in the history of photography on page 458 of the Almanac. Despite its brevity P-M: No. 60 is remarkable for its readableness, completeness of information and illustrations.

The 450 pages of advertisements included in the Almanac give a very full survey of the specialties of the world's principal photographic manufacturers, describing many items as yet unknown on this side of the Atlantic. Altogether a wonderful book in everyday usefulness and interest. I cannot imagine a photographer getting on in the world without it.

PHOTOGRAPHY AND ITS MYSTERIES. By Charles R. Gibson. 256 pages, 30 illustrations. $5\frac{1}{2} \times 7\frac{1}{2}$. Cloth, \$2. Philadelphia: Lippincott.

This is a new volume in the "Science for Children Series" and gives a very simple explanation, in easily understood language and attractive diagrams, of photography and its uses, with emphasis on its mysteries or wonderful achievements; e.g, motion pictures, X-rays, pictures by wire, etc. It is a most desirable gift-book for any boy or girl under ten, and well calculated to arouse interest in the camera.

EXPRESSION IN PIGMENTING. By F. C. Tilney. (No. 4 of Tracts for Pictorial Photographers). 33 pages, 6 illustrations. London: Greenwood, 1/2d. New York: Tennant and Ward, 50 cents.

I have enjoyed this fourth tract in Mr. Tilney's useful Series, and have marked quite fifty passages apt for quotation, but this would not be fair, so I refrain. You must read the tract for yourself. Primarily it has to do with expression in pigmenting (bromoil), but incidentally Mr. Tilney says many things of great profit to all pictorialists. His discussion of Relative Tone Values and Aerial Perspective, for example, is as clear and helpful a statement of these things as I have yet seen. And his attempt to explain just what that illusive and indefinable something is ("feeling") which gives us pleasure in works of art is very satisfying. The six illustrations are directly connected with the main theme of expression in pigmenting, and effectively show the power of control and range of individuality in expression offered by the bromoil process.

ABRIDGED SCIENTIFIC PUBLICATIONS, from the Research Laboratory of the Eastman Kodak Company. Vol. VII; 1923; 139+VI pages. Rochester: Eastman Kodak Co.

The papers and communications of the Kodak Research Laboratory, published in various scientific and technical journals here and abroad during 1923, are here presented in shortened form within the covers of a single volume for convenience of reference. There are twenty-one papers, all, with the exception of that on Motion Picture Photography for the Amateur, by Dr. C. E. K. Mees, severely technical in character and treatment. The subjects dealt with cover a wide range in physics (optics), inorganic, organic, physical and colloid, and analytical chemistry, and photographic theory and practice, and interestingly illustrate the tendency of present day research in these fields.

With the publication of this seventh volume, the Series of Abridgments offers a concise record of the major activities of the Kodak Research Laboratory since its organization in 1912, constituting an unique chapter in the literature of photography.

WILLIAM GAMBLE. In the December issue of *The Inland Printer* I note an excellent portrait of William Gamble, by Furley Lewis, with some account of his life, by Stephen H. Horgan, and the news of his retirement from active business. As the editor of *Penrose's Process Year Book* and *Process Work*, the author of many textbooks on process engraving and the head of A. W. Penrose & Co, London, Mr. Gamble has played an important part in the development of modern reproduction methods during the past quarter century. A friendly man, short in stature but broad minded and big hearted; with all his friends on this side of the Atlantic I wish him many happy years of ease and comfort in his retirement.

PENROSE'S ANNUAL, 1925. Edited by William Gamble. 142 pp. 81 plates and illustrations. \$4.00. London: Lund, Humphries Co. U. S. Agents, American Photographic Publishing Co., Boston.

The interest and quality in illustration and reading matter which have characterized *The Process Year Book* for more than a quarter century are well sustained in the new volume just received. In keeping with the general trend in reproduction methods, the Editor's review of the progress of graphic arts during 1924, and the practical papers which make up the text pages, have much to say about recent developments in color reproduction and the modern processes of rotary gravure and offset in monochrome and color work. T. Thorne Baker has a useful article on "Modern Progress in Color Sensitizing"; W. J. Smith and E. L. Turner offer "A Scaling and Uniform Exposure System for a Process Camera";

and Stephen H. Horgan tells the story of the first "Telephoning a Portrait in Colors."

The special plates and supplements showing the most recent results obtained in color reproduction include specimens of single and multi-color gravure; offset lithography in monochrome and color, with a few clever facsimiles of pencil sketches; a collection of 26 wood-engravings of the 'sixties; two remarkable reproductions of watercolors, and many other methods used in current process practice. Almost all these specimens represent the work of British firms. It would seem desirable that the Veteran Editor of the Annual, now released from the cares of active business, should give us a wider selection of plates showing the work of American, French, German and other Continental houses in the 1926 volume.

The American edition of the Annual is limited. Those who desire copies should not delay in securing the book before it disappears from view.

News and Comment

Pictorial Photographers of America. At the recent annual meeting of this organization the following new officers for the ensuing year were elected: President, G. W. Harting; Resident Vice-President, Mrs. Antoinette B. Herve; Secretary, Dr. Arthur Nilsen; Treasurer, Jerry D. Drew. By a change in the Constitution the following Regional Vice-Presidents were appointed, as special representatives of the P. P. A. in the sections named: George H. High, Chicago; C. Blickensderfer, Denver; E. F. Dreher, Seattle; John C. Stick, Los Angeles; Frank R. Fraprie, Boston; Anson Herrick, San Francisco; O. C. Reiter, Pittsburgh; Forman Hanna, Globe, Arizona; and Francis O. Libby, Portland, Maine. The membership at the end of 1924 was 421, almost every state in the Union being represented.

Announcement was made of the Second International Salon of the P. P. A. to be held at the Galleries of the Art Center, New York, from May 15 to June 15, 1925. Entry forms and particulars for this Salon may be had on application to John H. Kiem, Chairman of the Exhibition Committee, 65 East 56th Street, New York City. The last day for the receiving of prints is April 18th.

Spectrum Analysis. The first lecture of 1925 at the Royal Photographic Society, London, was given by Mr. T. Thorne Baker, and dealt with "Photography in Chemical Analysis: The Forward March of Spectrum Analysis." Mr. Baker, an authority on the use of the spectroscope in analytical chemistry, gave a comprehensive survey of the usefulness of spectroscopic investigation in the analysis of dyes and color substances, the differentiation between raw papers, in X-ray work, and the investigation of light sources. Among the spectro-photographic equipment

shown by the lecture was a mammoth camera, said to have been constructed at the cost of about \$1,250.

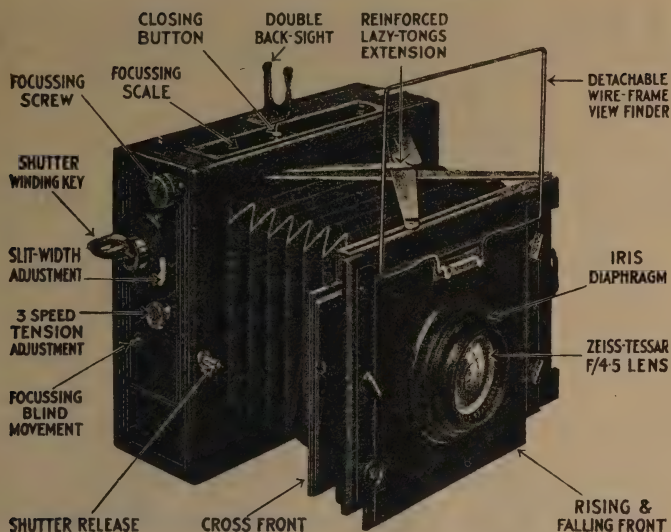
The Rev. Clarence E. Woodman, Ph. D., C.S.P., whose *Table of Angles of View* is familiar to all photographers, died December 6th, at Oakland, California, at the age of 72.

Dr. Woodman, a priest of the Congregation of St. Paul and at one time stationed at the church of the Paulist Fathers, New York City, was an enthusiastic amateur photographer in the eighties, and contributed many useful papers on the technical side of photography to the journals and yearbooks of that period. He was also an astronomer of note and accompanied several of the Smithsonian eclipse expeditions, introducing the methods of modern photography in that science. In recent years he served as a professor and special lecturer on scientific subjects at the Catholic University of America and the University of California. A brilliant scholar, good padre and faithful friend: *lux perpetua luceat ei*.

Franklin Institute Centenary. A report of the Proceedings and papers by eminent scientific workers read at the recent Centenary Celebration of the Franklin Institute, Philadelphia, will be published in one or more memorial volumes. Information as to these can be obtained from the Secretary of the Institute.

Java has at last fallen into line, and announces a Photographic Salon, to be held at Bandoeng, Java, from June 20 to 27, 1925. Medals and special prizes will be awarded. For particulars intending American and British exhibitors should communicate with Mr. E. J. G. Schermerhorn, 50 Baengsoeweg, Bandoeng, Java, Dutch East Indies.

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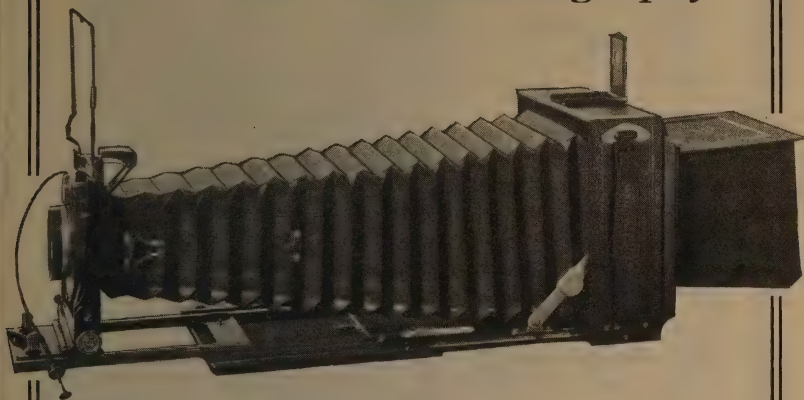
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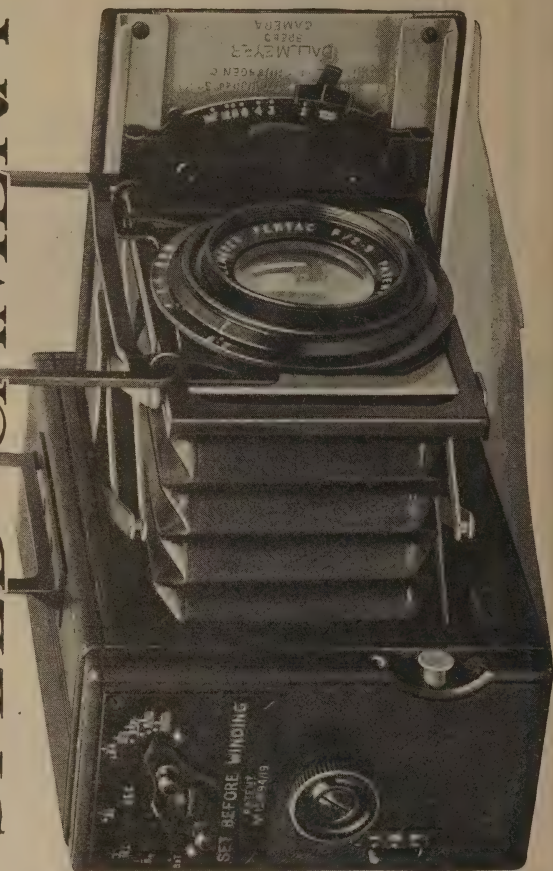
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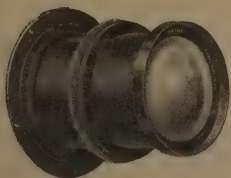
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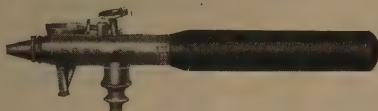
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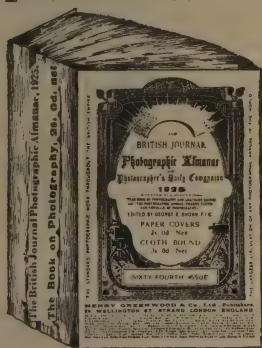


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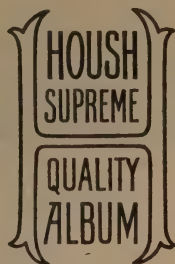
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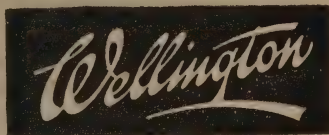
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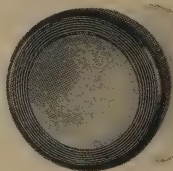
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